STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C. L. "Butch" Otter, Governor
Curt A. Fransen, Director

May 4, 2012

Ben Johnson
Gobers, LLC
11215 E. Trent
Spokane Valley, WA 99206
atrustedname@aol.com

Subject: **Gobers Septage Land Application Facility**, Preliminary Engineering Report and Site Approval

Dear Ben:

The Idaho Department of Environmental Quality (DEQ) has completed the review of the revised preliminary engineering report (PER) titled "Gobers, LLC, Agricultural Reclamation Project, April 12, 2012" prepared by Robert Tate, P.E., of Tate Engineering and submitted to DEQ on April 12, 2012 (P&S #11992). The PER discusses a proposed 150-acre domestic septage land application site located about 1.5 miles north of Plummer, Idaho on the east side of State Highway 95. Three (3) phases of site development are proposed starting with Phase 1 at a capacity of 20,000 gallons of septage per week and by Phase 3 capacity would be increased to 120,000 gallons per week.

On April 3, 2012, DEQ staff (John Tindall and Matt Plaisted) visited the proposed site with you and your consultant, Rob Tate. The purpose of the site visit was to determine if a successful agronomically-based operation could occur at the site. The site has been used for hay production and farm equipment can be driven on the rolling hills of the site.

The PER provides a management plan for the land application of septage from March until September incorporating the use of three (3) crops: spring wheat; winter wheat; and grass/hay crop. Sheet 6 of 10 in the PER shows a 50-foot buffer strip around the entire site and intermittent surface water streams where septage will not be applied. Also shown on Sheet 6, 20-foot vegetative buffer strips will be constructed along the contours of the fields to reduce the potential for run-off. The septage would be screened prior to land application. Page 9 of the PER, shows that there are no public wells within 0.25 miles of the proposed site and the closest domestic private well is 800 feet west of the proposed site.

According the section of the Federal Regulations, 40CFR Part 503, detailing the land application of domestic septage and using nitrogen loading rates for the proposed crops recommended by the University of Idaho Agricultural Extension Service, about 54,000 gallons/acre/year of septage could be land applied on this site. That is equivalent to about 2 inches of septage per acre per year. The septage would be used to replace inorganic fertilizers to provide sufficient nitrogen for crop growth while not over-applying nitrogen that could negatively affect ground water quality.

Based on the site visit and review of the PER, the proposed site appears to be suitable for the land application of domestic septage. The following items will need to be addressed before the land application of domestic septage on the proposed site can occur:

1. **Concrete Transfer Pad Drainage** – A 60-foot by 28-foot, 8-inch thick, uncovered concrete pad is proposed to be constructed in Phase 1. Screened septage will be transferred from the delivery trucks to the 8,000 gallon storage tanker and from the storage tanker to the land application farm equipment on the concrete pad. A 6-inch high curb around the pad will provide a containment volume of about 9,000 gallons in case of a spill. The pad will be sloped to a center drain connected to a manhole. Precipitation on the uncovered pad will need to be treated as wastewater (2 feet of annual precipitation equates to about 25,000 gallons of water annually). Consideration should be given to including a valve between the manhole and drainage grate on the pad to prevent the manhole from overflowing (manhole volume is about 560 gallons). Please revise the applicable section of the report to discuss how the pad drainage system will function and be maintained. The calculations for the containment volume should also be provided with consideration for the vehicle access onto the pad. The PER is approved contingent on addressing this issue.
2. **Plans and Specifications for the Septage Receiving/Storage Facilities** – Plans and specifications for the septage receiving/storage facilities will need to be submitted to DEQ for review and approval prior to starting construction.
3. **Operation and Maintenance (O&M) Manual** – An O&M Manual will need to be submitted to DEQ for review and approval. The manual will focus on how through proper management of the site, domestic septage can be land applied while protecting surface water quality, ground water quality and public health. Approval of the site for the land application of septage would be contingent on compliance with the approved O&M Manual.

Please contact me at (208) 666-4629 if you have any questions.

Sincerely,

John Tindall

John C. Tindall, P.E.
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Gobers Septage Land Application PER. TRIM (P&S #11992)